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ABSTRACT

This document is a digest of a final report presenting the view and experiences of former students in Texas high schools who left as graduates or dropouts during the school years 1963-64 and 1968-69. The study's objectives were to: (1) determine the extent to which work and studies or training beyond the high school were based on high school experiences, (2) gather employment status information, (3) obtain appraisals of courses, activities, and school personnel, (4) obtain suggestions for improving schools and preventing dropouts, and (5) establish a data base for educational planning and assessment. From the data collected, it was concluded that: (1) The most popular high school courses were electives in which practical skills were learned, (2) Demand for more advanced college-preparatory courses was balanced if not exceeded by a reaction (from those never entering or not succeeding in college) against required courses, (3) The counselor's role should be more clearly defined, (4) Although teachers were generally approved, numerous criticisms indicated a need for greater attention in teacher selection and retention, (5) Boredom is a major problem in many classrooms and an important factor in dropouts, and (6) Progress was made by the schools between 1964 and 1969 in redirecting programs toward the world of work. The three report volumes are available in this issue as VT 021 092-VT 021 094. (MF)

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ED 080734

Texas Education Product Study

VT021 091

Digest of Final Report

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Texas Education Product Study

Digest of Final Report
March, 1973

INTRODUCTION

This digest of a much larger report is about Texas public high schools as viewed by their ex-students.* It summarizes the views and experiences of students (now adults) who left Texas high schools as graduates or as dropouts during the school years 1963-64 and 1968-69. The Study's objectives were:

- To determine the extent to which work and studies or training beyond the high school are based upon high school experiences;
- To gather comprehensive employment status information;
- To obtain appraisals of courses, activities, and school personnel;
- To obtain suggestions for improving schools and preventing dropouts;
- To establish a data base for educational planning and assessment.

The research design for this Study was developed by the Southwest Educational Development Laboratory for the Advisory Council for Technical-Vocational Education in Texas. With the cooperation of local school officials, the Laboratory accomplished the Study for the Texas Education Agency.

The Commissioner of Education requested 89 districts (varying in size, geography, ethnic membership, and economic conditions) to participate. Specific persons from specific high schools were targeted for interview in accordance with the research design, which called for a representative sample (1 in every 20 possible interviewees for each of the 1963-64 and 1968-69 years) of the entire State.

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*For additional copies of this digest, or for information about availability of the full report, contact the Department of Occupational Education and Technology, Texas Education Agency, 201 East 11th Street, Austin, Texas 78701

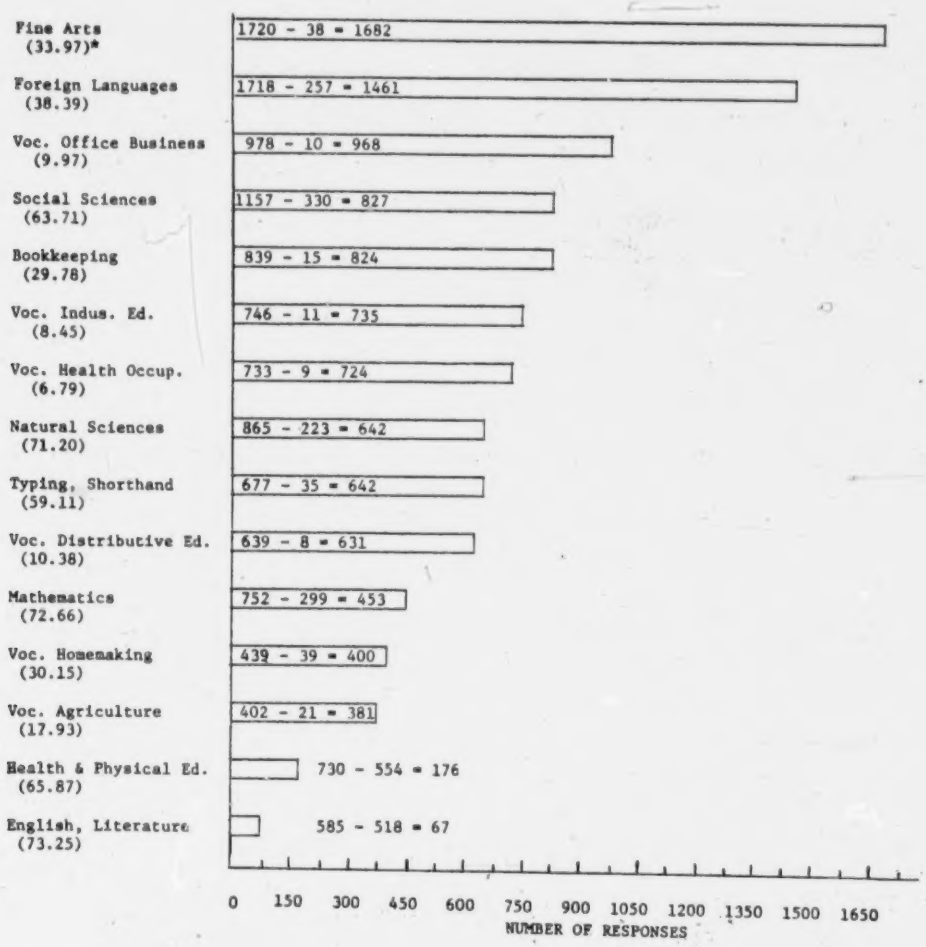
Of the 12,649 persons named in the probability sample, 5,063 responded by mail or interview to a 16-page questionnaire. Forty per cent of the responses came from the 1963-64 group and 60% from 1968-69. All 89 school districts participated. Respondents were 54% female and 46% male; 96% graduates and 4% dropouts; 9% Black Americans, 12% Spanish-surnamed, and 79% Anglo- or other Americans. They came from families in which only 9% of the mothers and 15% of the fathers had college degrees. The responses were obtained in 1972, largely during the months of September through December.

FINDINGS RELATED TO HIGH SCHOOL EXPERIENCES

Both 1963-64 and 1968-69 groups gave their highest approval to courses in which practical skills were taught. For the entire sample, the rank order of approval given to high school courses is as follows:

Subject Area	Unfav.	Neither Fav. Nor Unfav.	Fav.	Percent Favorable
Vocational Agriculture	69	106	545	77.7%
Vocational Office/Business	50	107	559	76.1
Typing, Shorthand	273	655	2,637	74.0
Bookkeeping	219	299	1,401	73.0
Vocational Homemaking	207	267	1,272	72.9
Fine Arts	346	604	2,058	68.4
Vocational Industrial Ed.	66	101	338	66.9
English, Literature	663	1,018	3,250	65.9
Vocational Distrib. Ed.	55	110	315	65.6
Health & Physical Ed.	671	990	2,996	64.3
Mathematics	773	1,071	3,009	62.0
Natural Sciences	660	1,216	2,909	60.8
Social Sciences	719	1,213	2,865	59.7
Vocational Health Occups.	59	100	209	56.8
Foreign Languages	926	840	1,603	47.6

Each ex-student was asked whether his high school had offered too many, about the right amount, or not enough courses in 15 subject areas. The following "net demand" summary resulted from subtracting the "too many courses" responses from the "not enough courses" responses:


Fine Arts (33.97)*
1720 - 38 = 1682
Foreign Languages (38.39)
1718 - 257 = 1461
Voc. Office Business (9.97)
978 - 10 = 968
Social Sciences (63.71)
1157 - 330 = 827
Bookkeeping (29.78)
839 - 15 = 824
Voc. Indus. Ed. (8.45)
746 - 11 = 735
Voc. Health Occup. (6.79)
733 - 9 = 724
Natural Sciences (71.20)
865 - 223 = 642
Typing, Shorthand (59.11)
677 - 35 = 642
Voc. Distributive Ed. (10.38)
639 - 8 = 631
Mathematics (72.66)
752 - 299 = 453
Voc. Homemaking (30.15)
439 - 39 = 400
Voc. Agriculture (17.93)
402 - 21 = 381
Health & Physical Ed. (65.87)
730 - 554 = 176
English, Literature (73.25)
585 - 518 = 67
0 150 300 450 600 750 900 1050 1200 1350 1500 1650
NUMBER OF RESPONSES

* Under each subject area named is the percentage of respondents who indicated that "About the Right Amount" of courses were offered by the high school.

Slightly more than 30% (1,529) of the respondents reported that their opinions had changed concerning the value of courses they took in high school. Of these, 1,343 named specific courses about which opinions had changed.

The direction of opinion changes was favorable for all subject areas except Natural Sciences, Social Sciences, Foreign Languages, and Health and Physical Education. The chief targets of negative reactors were History, Chemistry, and Spanish. Highest favorable opinion changes were toward Bookkeeping (90%), Typing/Shorthand (86%), Vocational Industrial Education (73%), Vocational Office/Business (69%), and Vocational Homemaking (68%).

Respondents were asked to indicate "as precisely as possible the courses you wanted and could not take" and "the courses you now wish that you had not taken." The responses to those questions (pages 5-6) illustrate the dilemma facing the school administrator desiring articulated programs that do more than just meet the greatest needs of the greatest numbers of students. For example, offsetting the 428 regrets because they took a foreign language were 445 "precise" indications that a foreign language was the course most desired but not taken.

Similarly, from the same total of 5,063 respondents came 410 regrets for having taken Mathematics and 327 indications that a Mathematics course was the one most desired but not taken. Forty-six wanted advanced Mathematics. While 111 regretted having taken Biology, 52 wish now that they had taken it; 42 of those who took it would like to have had more advanced work in Biology. While 196 regretted having taken Chemistry, 84 now wish that they had taken it; 34 of those who took it would like to have had more advanced work in Chemistry.

Summarized on the next two pages is the information obtained from 2,669 respondents who took courses they now wish they had not taken, and from 4,780 who said they wanted some course which they did (could) not take.

NUMBER WHO NOW WISH THEY HAD NOT TAKEN THIS COURSE*		NUMBER WHO WANTED TO TAKE THIS COURSE BUT DID NOT OR COULD NOT
= 7	(Auto) Mechanics	106 ==========
= 13	Office Education	99 ==========
=== 28	Industrial Shops	87 =========
= 5	Computer, Data P.	61 ======
3	Agriculture	55 ======
== 18	Distributive Ed.	53 =====
== 17	Drafting	42 ====
1	Electronics, Elect.	38 ====
0	Health Careers	36 ====
= 7	Cosmetology	28 ===
========== 145	Homemaking	93 =========
2	Crafts and Trades	17 ==
3	Photography	16 ==
2	Commercial Art	9 =
3	Other Vocat.,Tech.	83 ========
======== 83	Bkkpg, Accounting	255 ========================++
= 10	Business Law, Law	22 ==
======== 77	Shorthand	170 =================
========= 86	Typing	137 ==========+++
== 24	Other Business	282 ============================
== 20	Sociology	278 ============================
= 12	Psychology	248 =========================
=== 34	Economics	95 ==========
========== 116	Civics, Gov'ment	51 =====
========== 171	History	73 =======+
= 13	Other Soc. Sci.	56 ======
1	Humanities	34 ===
1	Philosophy	33 ===
3	Religion, Bible	16 ==
= 7	Calculus	120 ==========
==== 41	Trigonometry	37 ====
========== 131	Geometry	16 ==
++========== 128	Algebra	20 =+
= 11	Related Math	1
+======== 92	Math, unspecified	179 ==========+++++
========= 96	Physical Education	56 ======
==== 39	Health (Sciences)	37 ====
=== 0	Sex Education	25 ===
2	Physiology	12 =
1	Driver Education	12 =
= 8	R.O.T.C.	5 =

*Each = or + sign on the graph represents ten responses or major fraction thereof. The + sign identifies advanced versions of the courses.

(continued from previous page)

NUMBER WHO NOW WISH THEY HAD NOT TAKEN THIS COURSE		NUMBER WHO WANTED TO TAKE THIS COURSE BUT DID NOT OR COULD NOT
111	Biology	94
196	Chemistry	118
73	Physics	105
15	General Science	7
0	Geology	14
0	Anatomy	12
0	Zoology	5
55	Other Sciences	65
138	English, Literat.	188
13	Journalism	41
3	Reading	10
50	Speech (Debate)	129
11	Drama	67
63	Music	111
32	Art	183
0	Fine Arts, unspec.	42
53	French	76
23	German	53
0	Russian	11
189	Spanish	71
104	Latin	14
59	Langs., unspec.	220
0	Education	12
1	Architecture	6
0	Anthropology	13
2	Geography	5
0	Statistics	5
0	Archeology	3
0	Ecology	3
0	Engineering	4

Not represented in the above compilation were the 17 respondents who said they wish now they had not taken "study hall" and a miscellany of requests for courses in astrology, pro-humanism, penmanship, wildlife, forestry, science fiction, human relations, human behavior, consumer education, lip reading, writing for children, fashions, film production, oceanography, "Tex-Mex," and charm. The "Humanities" total on the graph includes about a dozen requests each for Chicano and Black studies.

The following percentages of teacher approval, by subject areas, are based only upon the ratings by the ex-students who took a stand; they do not include "Neither Favorable Nor Unfavorable" and "No Opinion" responses.

Subject Area	No. of Responses Favoring Teacher	Unfavorable Responses	Per Cent Favorable
Voc. Office/Business	475	37	92.8%
Voc. Industrial Ed.	278	24	92.1
Voc. Agriculture	512	57	90.0
Fine Arts	2,092	281	88.2
Bookkeeping	1,338	193	87.4
Typing, Shorthand	2,553	393	86.7
Voc. Distributive Ed.	255	45	85.0
Voc. Health Occupations	174	31	84.9
English, Literature	3,450	621	84.8
Natural Sciences	3,176	602	84.1
Voc. Homemaking	1,111	216	83.7
Social Sciences	3,115	620	83.4
Mathematics	3,048	749	80.3
Health & Physical Ed.	2,839	715	79.9
Foreign Languages	1,776	693	71.9

Respondents from all ethnic groups and districts of all sizes joined positively in giving an overall favorable endorsement (by an 8:1 ratio) to their teachers. Only slightly less enthusiastic were the dropouts of both years, who gave 5:1 approval to their teachers.

Seldom left unanswered was an open-ended question asking for the name and subject of the "best teacher" and the reasons for the selection. The following characteristics of the "best" teachers are listed, along with the percentage of the total response represented by each characteristic:

Ability to communicate with students and to create interest (38%)
Interest in students as individuals (24%)
Knowledge of subject matter (9.7%)
Dedication to teaching (7%)
Presentation of a challenge (4.6%)
Maintenance of discipline in the classroom (3.4%)
Personality, including sense of humor (3.8%)
Ability to prepare students for college (3.2%)
Fair and equal treatment of students (2.8%)
Ability to relate subject matter to students' lives (1.3%)

The applause for teachers was not universal. In response to an open-ended question concerning school improvement, 416 respondents (approximately 8% of the total) were critical of teacher performance. Suggestions for improving the quality of teaching came from 498 (slightly less than 10% of sample). The following tables show how these criticisms and suggestions were distributed by size of school district.

Criticisms	Size of School District* A	B	C	D	E	F	G	Total
Teachers should show more concern for students as individuals.	26	19	14	11	41	8	7	126
Better student-teacher communication is needed.	15	20	15	12	28	16	3	109
Teaching methods should be improved.	13	9	8	15	13	5	2	65
Teachers should be able to stimulate more interest.	9	6	4	5	8	4	2	38
Teachers should treat all students equally and fairly.	9	2	3	3	10	4	2	33
Teachers should put more emphasis on discipline in the classroom.	3	7	2	1	5	5	3	26
Teachers should put less emphasis on discipline in the classroom.	2	3	5	4	2	3	0	19
								416
Needed Improvements								
Employ better teachers.	37	36	29	38	90	52	31	313
Employ younger teachers.	0	3	1	12	13	6	3	38
Dismiss or retire older teachers.	2	1	3	5	10	3	4	28
Dismiss or retire teachers who "work only for the pay check."	3	3	1	3	5	7	0	22
Dismiss or retire incompetent teachers.	3	4	2	2	6	3	0	21
Improve teachers' salaries.	1	2	1	6	6	4	0	20
Be more selective in employing teachers.	2	1	4	4	4	3	1	19
Review teacher qualifications and effectiveness periodically.	3	1	4	3	5	3	0	19
Take athletic coaches out of academic classrooms.	2	2	1	2	6	4	1	18
								498

*These seven categories of district size were used:
A-- 5 largest (Houston, Dallas, San Antonio, Fort Worth, El Paso)
B-- Other large city core districts (15,000 - 50,000 A.D.A.)
C-- Metro-fringe districts (15,000 - 50,000 A.D.A.)
D--55,000 - 14,999 A.D.A.; E--1,000 - 4,999 A.D.A.; F--400 - 999 A.D.A.;
E--0 - 399 A.D.A. The A.D.A. figures used were for 1968-69.

Respondents who had contact with counselors seriously questioned the adequacy of assistance they received from counselors "in planning your courses in high school and beyond" and "in planning a job or career." A typical comment was, "Counselors are often way too forceful and seem to skip the fact of what the individual wants to do and try to make him want to do what his tests show he can do."

A college senior, who recently became the first Mexican American accepted by a Kansas law school, recalled being told as a sophomore in high school that he was not college material. A cliff-hanging college student made this comment: "I took a test to see if I could go to college. I didn't pass them (sic). I was told you had to pass to go to college. Well, now I'm in college and I just finished my second semester with a 'C' average. I don't think tests should be given."

The tabulation of more than 3,000 ratings of counselors' assistance indicated relatively higher approval of their work in 1968-69 than in 1963-64:

Counselors' Assistance in Planning Courses

Group	Unfavorable Responses		Neither Fav. Nor Unfav.		Fav. Responses	
1963-64	534	44.8%	292	24.5%	366	30.7%
1968-69	860	39.1	511	23.2	830	37.7

Counselors' Assistance in Planning for a Job or Career

1963-64	509	49.5	276	26.8	244	23.7
1968-69	841	45.5	486	26.3	521	28.2

In their open-ended comments related to improving the schools, the ex-students generally recommended that more counseling be provided, not only in career and course planning, but also in the area of personal counseling. The questionnaire did not elicit responses in the area of personal counseling, nor did it ask for a total evaluation of counselors.

Slightly more than one-half of the respondents (2,550 of 5,063) reacted favorably toward their high school principals. There were 840 unfavorable responses, resulting in an approval ratio of 3:1.

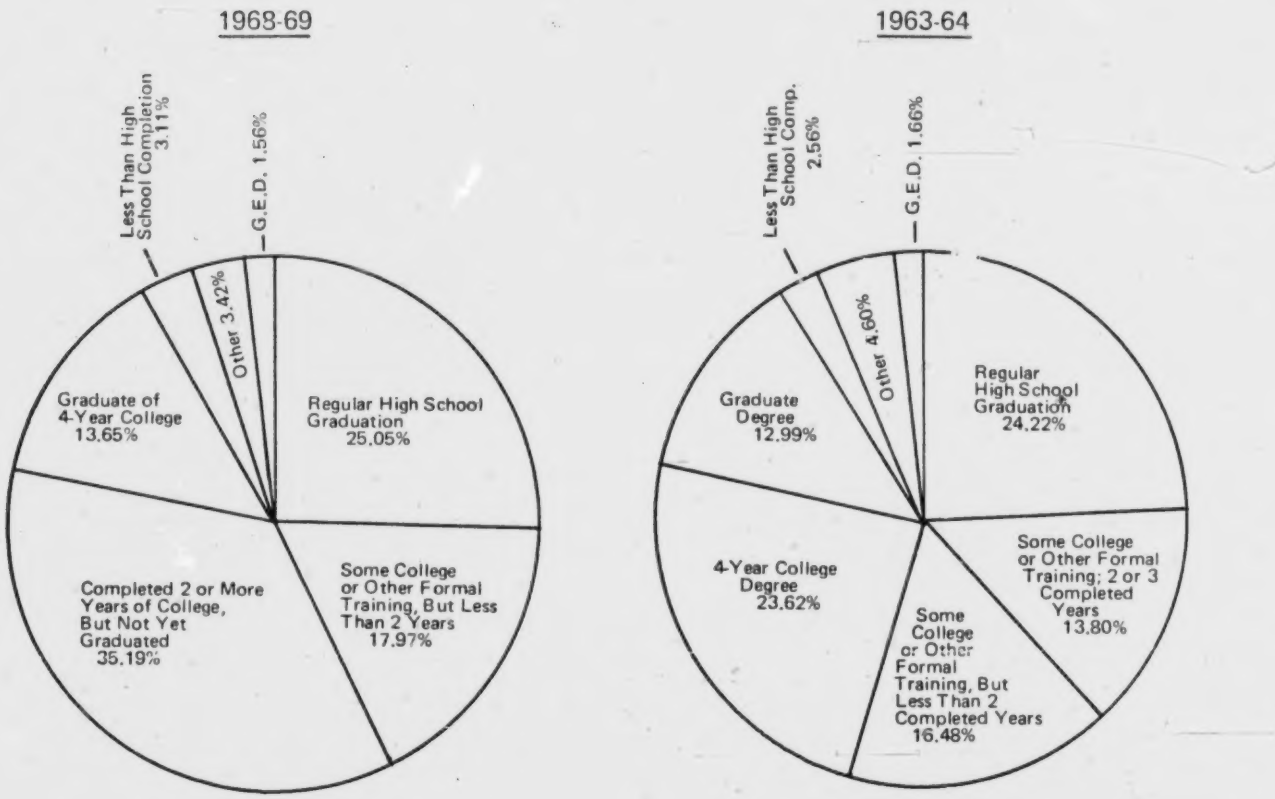
Respondents gave overwhelming approval to extracurricular activities in which they participated. Varsity Athletics received the highest favorable reaction (84%), followed by Student Publications (80%), Intramural Athletics (78%), Drama Club/Group (78%), Band/Orchestra (78%), Vocational Organizations (76%), Choral/Voice/Music (76%), Drill Team/Pep Squad (75%), Student Government (70%), Academic Clubs (60%), and Future Teachers Clubs (59%).

Many non-participants were critical of Varsity Athletics, advocating more activities for women and non-participating males. An often-repeated criticism from non-participants was the overemphasis of athletics in comparison with academic programs. The smaller the school district, the larger was the percentage of students participating in extracurricular activities and the higher the percentages of approval given to these programs.

Boredom, or lack of interest, was cited as the major reason for dropouts by those who had not dropped out. Other reasons for dropping out cited by the graduates were (in order of frequency) family problems and lack of parental guidance, financial problems, apathy or hostility on the part of teachers and other school personnel, emotional problems, "irrelevancy of school," lack of motivation, marriage and/or pregnancy, poor grades, insufficient opportunity for vocational training, and desire for independence.

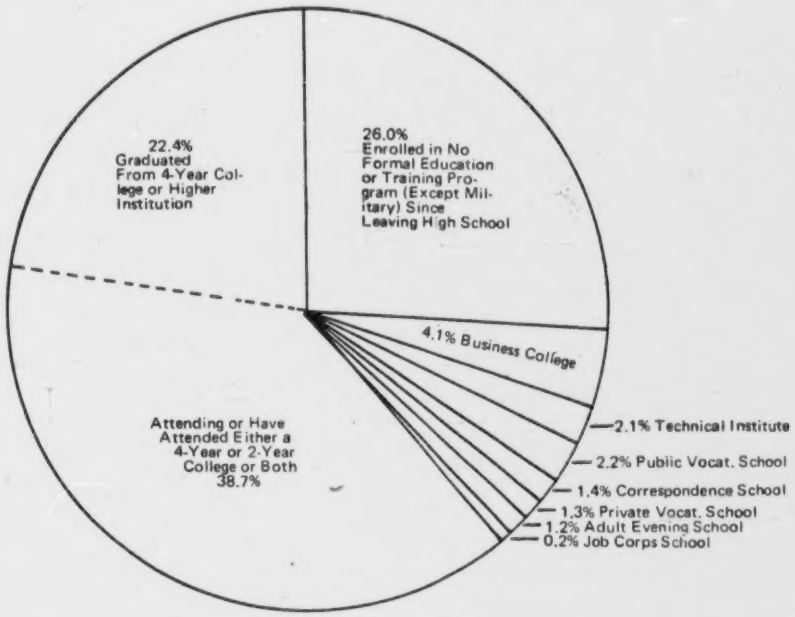
The most prevalent reason for dropping out cited by the dropouts themselves was marriage and/or pregnancy. Other reasons they gave (in order of frequency) were lack of interest in classes, financial problems, conflict with school authorities, problems at home, inability to relate high school to the "real" world, death or major illness in the family, exclusion from social or other status-conferring activities, inadequate preparation for high school, and general dissatisfaction with school.

High school graduation was the terminal point in the formal education of approximately one-fourth of the respondents for both years. The highest levels of formal education or training achieved are summarized:


1968-69
Less Than High School Completion 3.11%
G.E.D. 1.56%
Other 3.42%
Graduate of 4-Year College 13.65%
Regular High School Graduation 25.05%
Completed 2 or More Years of College, But Not Yet Graduated 35.19%
Some College or Other Formal Training, But Less Than 2 Years 17.97%
1963-64
Less Than High School Comp. 2.56%
G.E.D. 1.66%
Other 4.60%
Graduate Degree 12.99%
Regular High School Graduation 24.22%
4-Year College Degree 23.62%
Some College or Other Formal Training; 2 or 3 Completed Years 13.80%
Some College or Other Formal Training, But Less Than 2 Completed Years 16.48%

FINDINGS RELATED TO EXPERIENCES SINCE HIGH SCHOOL

Approximately 78% of the 1963-64 group and 71% of the 1968-69 group enrolled in some type of formal education or training (other than military) after leaving high school. Types of training were:

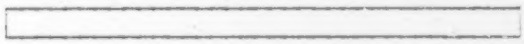
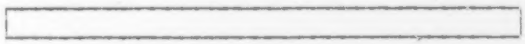
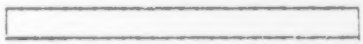
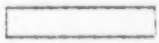
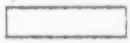
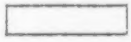
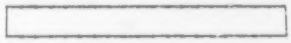

22.4% Graduated From 4-Year College or Higher Institution
26.0% Enrolled in No Formal Education or Training Program (Except Military) Since Leaving High School
4.1% Business College
2.1% Technical Institute
2.2% Public Vocat. School
1.4% Correspondence School
1.3% Private Vocat. School
1.2% Adult Evening School
0.2% Job Corps School
Attending or Have Attended Either a 4-Year or 2-Year College or Both 38.7%

Respondents reported post-high school enrollments in these fields:

Career Field	Pct. of Total	Career Field	Pct. of Total
Education	21.2%	Marketing/Distribution	2.2%
Health Occupations	6.9	Communications/Media	1.2
Office/Clerical	6.5	Equipment Operation	1.2
Finance	3.1	Agriculture/Agribusiness	1.1
Gov't (Public Service)	3.0	Personal Services	0.9
Construction/Engineering	2.5	Transportation	0.4
Electricity/Electronics	2.5	Manufacturing	0.3
Crafts or Trades, skilled	2.5	OTHER	11.0
Did not enroll, or made no response to question			33.7

Sixteen percent of the 1963-64 group and 9% of the 1968-69 group reported having completed the program for which they enrolled; 20% of the 1963-64 group and 39% of the 1968-69 group were still enrolled.

Respondents gave these reasons for selecting particular schools or training programs:

34.5%	It was close to home.	
	It was recommended by:	
34.4	Friends	
24.1	Parents	
10.1	High School Teachers	
7.5	High School Counselors	
1.0	Rehabilitation Couns.	
8.1	Representatives of the Institution	
18.7*	Other Reasons	

The 3,744 enrollees in formal education or training programs beyond the high school reported the following means of support:

Type of Support	Times Mentioned	Pct. of 3,744 (Total Enrollees)
Parents	2,509	67.0
Worked part time or more	2,224	59.4
Scholarship	538	14.4
Loan	528	14.1
Spouse worked	493	13.2
Veterans Administration	303	8.1
National Defense Education Act	240	6.4
Social Security Administration	156	4.2
Vocational Rehabilitation	40	1.1
Manpower Development Training Act	25	0.7
Other	243	6.5
	7,299	195.1*

*The percentage totals exceed 100% because respondents were asked to check all items that applied to them.

Respondents were asked to check (among 11 alternatives) or write the reasons some education or training programs were discontinued before completion; 3,401 reasons for discontinuance were categorized according to the importance respondents assigned to them:

	Of Some Importance	Fairly Important	Most Important
Needed to work	96	162	287
Got married	73	78	261
Did not hold my interest	135	139	158
Did not relate to what I wanted to do in life	99	104	141
Grades were too low.	137	84	80
Teaching was not good.	118	70	78
Needed at home	53	52	77
Too expensive in respect to benefit gained	114	86	72
Did not offer subject(s) needed	64	37	43
Health problems	27	21	40
Wanted to be with friends who were not in the program	24	16	12
Other reason	3	18	342
TOTALS	943	867	1,591

An analysis of the 363 responses in the "Other reason" classification revealed military service and pregnancy as the most important reasons not listed on the questionnaire.

The percentages of respondents who, at the time of the survey, were planning to enroll for additional education or training are summarized by the types of institutions in which they plan to enroll:

	1963-64 Group	1968-69 Group
Senior Colleges, Professional and Graduate Schools	38.0%	44.4%
Junior (Community) Colleges	6.1	6.8
Business Colleges	1.7	3.0
Correspondence Schools	2.9	1.2
Vocational Schools	1.5	2.4
Apprenticeship Training	1.4	1.6
Technical Institutes	1.2	2.4
Evening High Schools	0.7	1.0
TOTALS	53.5%	62.8%

The preceding percentages would be misleading if used to compare types of institutions. All members of the sample who had and were able to carry out plans to attend programs of three years duration or less had time to complete them before this survey was made. Present plans for senior college, professional, and graduate schools belong to many persons who earlier attended junior colleges. Seventeen percent of those entering formal education or training beyond the high school checked the junior college as the institution where they spent most of their training time.

At the time of this survey, approximately 77% of the employed members of the 1963-64 group were working in what they claim are their career fields; approximately 53% of the employed members of the 1968-69 group claimed to be working in their career fields.

Each respondent was asked to specify his or her career goal. For both groups, the teaching profession emerged as the predominant career field:

1963-64 Pct.	Field Location of Career Goal	1968-69 Pct.
17.5%	Education	16.0%
7.3	Health Occupations	9.6
7.1	Office/Clerical	8.6
5.4	Finance	4.7
5.4	Marketing and Distribution	4.3
5.0	Government (Public Service)	4.4
3.5	Construction and Engineering	2.9
3.4	Crafts and Trades	3.5
2.9	Electricity/Electronics	2.5
2.3	Agriculture/Agribusiness	2.3
1.5	Communications/Media	1.6
1.3	Transportation	1.0
1.1	Equipment Operation	1.4
0.8	Personal Services	0.8
0.7	Manufacturing	0.5
14.1	OTHER	10.8
20.0	No Career Goal or No Response	24.9
99.3%	TOTALS	99.8

The times when respondents chose their present career goals are summarized, by year of leaving high school:

Career Decision Was Made:	1963-64 Frequency	1963-64 Pct.	1968-69 Frequency	1968-69 Pct.
During elementary school years	99	7.2%	150	7.3%
During junior high school	100	7.2	197	9.5
During high school years	359	26.0	693	33.6
While attending college	345	25.0	622	30.1
While working on a job after leaving formal education	461	33.4	378	18.3
While studying in proprietary school	18	1.3	24	1.2
TOTALS	1,382	100.1%	2,064	100.0%

At the time of this survey, 23% of the respondents reported they were not employed. Nine percent said they had never been employed; 14% said they previously had been employed. Eleven percent said they were "housewives not otherwise employed." Three percent were self-employed.

Only 45% of the total sample of 5,063 indicated they were working on a full-time basis -- this included 51% of the 1963-64 group and 36% of the 1968-69 group.

By sex and marital status, the percentages of employed respondents who had been with present employers more than one year are as follows:

Sub-Group	Total in Sub-Group	Number Employed	Number Employed More Than 1 Year On Present Job	Pct. of Employed Who Have Had Same Job More Than Year
Single Females, 1964	143	128	91	71.1%
Single Females, 1969	753	481	209	43.5
Married Females, 1964	886	413	261	63.2
Married Females, 1969	954	459	212	46.2
Single Males, 1964	273	221	139	62.9
Single Males, 1969	820	539	226	41.9
Married Males, 1964	680	627	418	66.7
Married Males, 1969	500	439	220	50.1

Although respondents gave priority to three other fields (Education, Health Occupations, and Office/Clerical) when they named their present career goals, Marketing and Distribution ranked first as the present source of employment for respondents who were employed (or had been employed since high school). Shown the names of 15 broad fields or categories and asked "In what kind of work is your PRIMARY employer (or FORMER employer if you are no longer employed) engaged?", 3,954 respondents answered as follows:

Employment Field	No. Empl.	% of Total	Employment Field	No. Empl.	% of Total
Marketing & Distribution	511	12.9%	Communications/Media	156	3.9%
Education	483	12.2	Office & Clerical Svcs.	139	3.5
Health Occupations	292	7.4	Agriculture/Agribus.	136	3.4
Manufacturing	290	7.3	Craft or Skilled Trade	128	3.2
Government (Public Svc.	271	6.9	Transportation	114	2.9
Finance	266	6.7	Personal Services	69	1.7
Construction/Engrng/Arch.	228	5.8	Equipment Operation	47	1.2
Electricity/Electronics	160	4.0	OTHER	664	16.8

By specialization and year of leaving high school, the 1964 pre-college respondents led all other sub-groups in the percentage of the sub-group earning more than $650 per month:

Gross Earnings Per Month	Pre-College Group		Vocational Group		General Ed. Group	
	1963-64	1968-69	1963-64	1968-69	1963-64	1968-69
No Information	20.8%	27.2%	29.5%	31.2%	25.4%	28.4%
Less Than $217	2.2	11.8	3.6	6.7	1.7	6.0
$218 to $325	4.0	17.7	6.3	17.9	7.4	12.5
326 to 433	7.5	17.7	11.9	18.6	11.4	22.3
434 to 650	22.5	19.2	24.6	19.4	25.4	21.2
651 to 867	21.3	4.3	14.0	3.9	18.8	6.0
868 to $1,084	10.9	1.4	5.5	1.2	6.0	2.1
$1,085 or More	10.8	0.7	4.5	1.2	4.0	1.5

Since leaving high school, 90% of the 1968-69 group and 96% of the 1963-64 group have held at least one job. To a question concerning the relationship of their high school courses to the first job they held, respondents checked the following categories:

Pct. of 1963-64 Group Making This Response	Response	Pct. of 1968-69 Group Making This Response
45.9%	"No relation I could see"	48.8%
15.5	"Almost completely unrelated"	11.8
22.2	"Somewhat related"	18.3
6.9	"Closely related"	5.6
5.5	"Directly and very closely related"	5.5
4.0	Never employed or no response	10.1
100.0%		100.1%

Respondents were asked to indicate "the course most valuable to you in terms of the work you did on the first job you held after leaving high school." The results indicated that all six vocational areas achieved a higher percentage of the job preparation tasks between 1964 and 1969:

Curriculum Area of the Most Valuable Course On Respondent's First Job	Pct. of Total for 1963-64	Pct. of Total for 1968-69
Typing, Shorthand	27.1%	26.5%
Mathematics	26.3	22.1
English, Literature	10.6	7.8
Bookkeeping	6.1	5.8
Natural Sciences	5.1	3.9
Vocational Agriculture	4.7	4.8
Fine Arts	3.9	3.1
Health & Physical Education	3.5	5.2
Vocational Industrial Education	3.2	6.0
Vocational Homemaking	2.9	4.8
Vocational Office/Business	2.8	4.5
Vocational Distributive Education	1.4	2.8
Social Sciences	1.4	1.0
Foreign Languages	0.4	1.1
Vocational Health Occupations	0.4	0.7

Respondents who had resigned jobs were asked to check their reason(s) for resigning. They were invited to check more than one reason. A total of 6,915 checks resulted:

Reason for Resigning	Number of Respondents Citing This Reason
Wanted to return to school	1,534
Received offer of better pay	1,012
Dissatisfaction with pay	883
Lack of opportunity	804
Had to move with family to another city	473
Disliked supervisor or co-workers	438
Disliked work assignment	419
Received work opportunity more in line with career	323
Received training opportunity in career field	272
OTHER REASON(S)	757
Total	6,915

Time and experience apparently changed the relative rankings of factors considered by respondents in their selection of first and present jobs. The amount of pay, benefits, security, and job interest tend to replace the first-job factors of convenience and job availability:

FIRST JOB		FACTOR	PRESENT JOB	
Frequency	Relative Rank of Factor		Relative Rank of Factor	Frequency
1,463	1	Knew of no other job	8	501
1,029	2	Conveniently located	4	1,069
933	3	Available part time	7	545
778	4	Amount of pay	1	1,347
753	5	Most interesting opening	2	1,312
735	6	Desirable working hours	5	993
535	7	Offered security	3	1,173
493	8	Grew from job during school	9	104
391	9	Special employee benefits	6	970

Respondents were asked to indicate the degree of seriousness of nine specific problems in relation to both their first and present jobs. Although "maintaining good relations with supervisor" and "getting to work on time" held slight leads as problems considered to be "very serious," the job requirements most frequently mentioned as "occasional" problems were "doing work accurately" and "learning skills required."

Job Requirement	No Problem At All	Occasionally A Problem	Very Serious Problem
ON FIRST JOB:			
Maintaining good relations with supervisor	3,090	379	70
Getting to work on time	3,005	541	49
Understanding why the work should be done	3,080	423	47
Learning skills required to do the job well	2,811	691	46
Taking instructions from more experienced employees	3,124	393	39
Maintaining good relations with other employees	3,071	439	39
Doing work accurately	2,704	777	32
Doing a full day's work each day	3,219	279	28
Getting to work every day	3,246	265	27
ON PRESENT JOB:			
Maintaining good relations with supervisor	2,555	281	37
Getting to work on time	2,503	394	32
Understanding why the work should be done	2,553	324	26
Learning skills required to do the job well	2,273	591	20
Taking instructions from more experienced employees	2,596	325	21
Doing work accurately	2,342	523	11
Doing a full day's work each day	2,669	186	16
Getting to work every day	2,713	172	11

SELECTED EXCERPTS FROM QUESTIONNAIRES

"I only learned how to type on a manual typewriter. Businesses use electric typewriters."

"It never occurred to me to prepare for a job if college didn't work out in four years."

"Foreign Language in high school was a paper exercise, not a speaking one."

"I make my living out of what I learned in Ag. class."

"I now realize how very important Typing and Shorthand education is even if one attends and graduates from college."

"With my college I was highly trained for nothing that would support a family."

"Chemistry was not hard enough."

"I wish I had taken the time and energy to fully understand Geometry and Trigonometry."

"With the exception of Mathematics, I could have afforded to skip high school entirely and go on to college."

"No Fine Arts were offered, but we had a very small Band."

"I thought I was going to coach. Instead, I entered the radio-announcing profession."

"I failed freshman English three times due to the shortcomings of my English training."

"My English teacher and I did not get along, but once in college I came to appreciate what he had taught us."

"Since I was required to take practically all these courses, I naively assumed that all would be of value to me."

"I took predominantly courses that prepared me for college, but since I didn't go, they haven't helped me much in getting a job."

"High school is so general it doesn't offer a lot for the person at either extreme, whether college-bound or going directly to a job."

"I was disillusioned at the irrelevancy of most courses. Now I think the preparation was worthwhile."

CONCLUSIONS

1. The most popular high school courses (as seen by respondents) are electives in which practical, world-of-work skills are learned.

2. A strong demand for more advanced college-preparatory courses is paralleled if not exceeded by a similarly strong backlash (from those never entering or not succeeding in college) against required courses.

3. The counselor's role should be more clearly defined.

4. Although respondents approved teachers generally, their criticisms were numerous and serious enough to indicate greater attention is needed in teacher selection and retention. Personal interest in (and concern for) the individual student is a vital element in teaching.

5. Boredom is a major problem in many classrooms and is an important factor in causing dropouts.

6. Demonstrable progress was made by the schools between 1964 and 1969 in redirecting programs toward the world of work. The considerable interest manifested by respondents in Sociology, Psychology, Philosophy, Religion, and Sex Education may be interpreted as interest in learning how to live as well as how to make a living.

IMPLICATIONS

The Study points to the continuing need for a differentiated curriculum, individualized to the fullest possible extent. Public schools responsive to the needs of all students must continue with multiple foci -- how to live, how to work, how to study.

The Study results illustrate the value of follow-up in assessing the strengths and weaknesses of public education in a changing society.

Questions concerning this Study may be addressed to:

TEXAS EDUCATION AGENCY
201 East 11th Street
Austin, Texas 78701

Abilene
Aldine
Alvord
Amarillo
Archer City
Arlington
Austin
Austwell-Tivoli
Avery
Bay City
Beaumont
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Blue Ridge
Boles Home
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